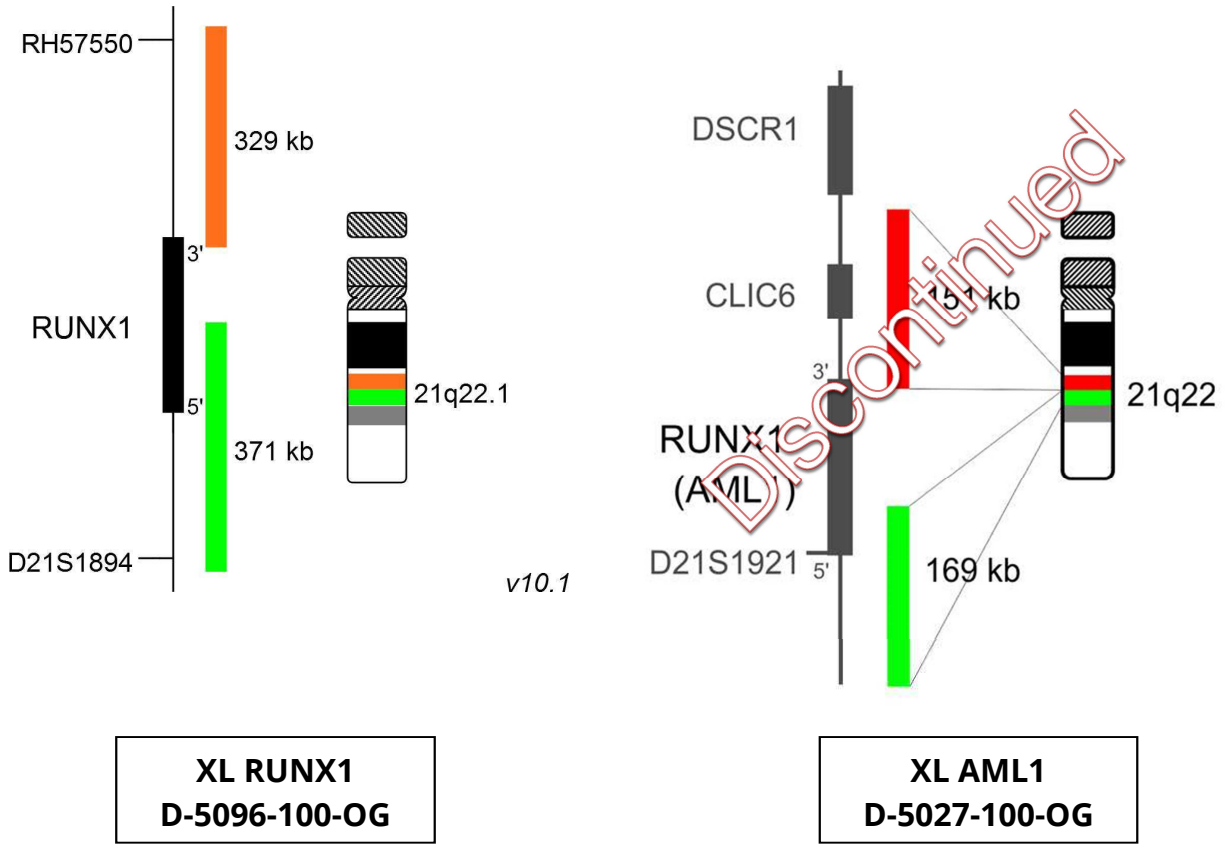


XL RUNX1

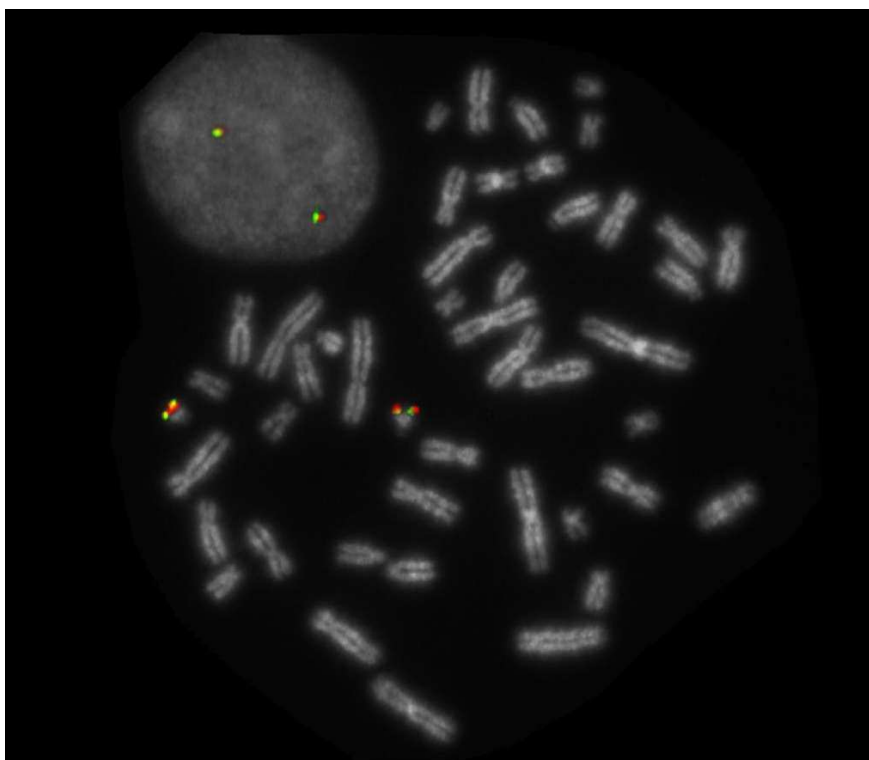
Break Apart Probe, Ref. No. D-5096-100-OG

We are introducing the new probe XL RUNX1 which is replacing XL AML1 D-5027-100-OG. Like its predecessor, XL RUNX1 is designed as a break apart probe. The probe hybridizing proximal to the breakpoint is labeled in orange, the probe hybridizing distally is labeled in green. The probe design not only allows the detection of translocations, but also the detection of intrachromosomal amplifications (iAMP21) of the RUNX1 gene region which are indicated by multiple fusion signals.

RUNX1 is a critical regulator of hematopoietic development and is commonly involved in chromosomal translocations associated with leukemia. Frequently occurring RUNX1 translocations are t(8;21) RUNX1/RUNX1T1, t(3;21) RUNX1/MECOM in acute myeloid leukemia and t(12;21) ETV6/RUNX1 in acute lymphoid leukemia. Since more than 40 different RUNX1 translocation partners have been identified, the number is constantly increasing, the RUNX1 break apart probe is a valuable tool in molecular cytogenetics. iAMP21 is defining a distinct subgroup of childhood B-cell precursor ALL. These patients have a high relapse risk when treated with standard therapy.



FACT SHEET



XL RUNX1 was hybridized to lymphocytes. One normal interphase and metaphase are shown.

Summary

Clinical Applications:

- AML, ALL

Related Probes:

- XL AML1 D-5027-100-OG *discontinued*
- XL t(12;21) D-5069-100-OG
- XL t(8;21) plus D-5114-100-OG

Literature:

- Martinez-Ramirez et al (2001) Haematologica 86: 1245-1253
- Zhang et al (2002) PNAS 99: 3070-3075
- Harrison et al (2014) Leukemia 28: 1015-1021

FACT SHEET
